

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for desalting water, comprising:
salt water is introduced into a membrane module and is separated into desalted water and concentrated salt water;

the salt water is conveyed at an increased pressure level from the pressure-compensating device, which comprises several piston devices, to the membrane module;

the concentrated salt water is discharged from the pressure-compensating device, transferring its pressure energy in the process;

salt water is introduced into the pressure-compensating device at a pressure level by means of a feed pump;

in front of the piston, the piston devices contain an intake chamber, which is connected to the feed pump and the membrane module, and in the rear of the piston they contain a discharge chamber, which is connected to the membrane module and a discharge line for concentrated salt water; and

during operation a continuous, preset, identical pressure is exerted on a part of the piston by means of a single hydraulic connecting line between the pressure chambers, which are located at the piston rear sides of the piston devices, to assist the pressure level, which is exerted on the piston by the concentrated salt water that has been introduced into the discharge chambers.

2. (Previously Presented) The method according to claim 1, wherein concentrated salt water alternately is introduced into the discharge chamber of one of several piston devices, whereby simultaneously the salt water conveyed from the intake chamber of a first piston device to the membrane module, and in that simultaneously salt water at the same pressure level is introduced into the intake chamber of a second piston device, whereby the

concentrated salt water is discharged at a low pressure level from the discharge chamber of the first piston device.

3. (Previously Presented) The method according to claim 2, wherein the piston devices of the pressure-compensating device are controlled in such a manner that simultaneously salt water is introduced into the intake chamber of at least one of a first piston device, concentrated salt water is discharged from the discharge chamber of the first piston device, concentrated salt water is introduced into the discharge chamber of at least a second piston device, and salt water is conveyed from the intake chamber of the second piston device into the membrane device.

4. (Original) The method according to claim 1, characterized in that the piston devices are regulated by controllable intake- and discharge valves.

5. (Original) The method according to claim 1, wherein the pressure exerted on a part of the piston is a continuous pressure.

6. (Currently Amended) A reverse osmosis device for the continuous desalting of water, in particular for the desalting of sea water, comprising:

- a membrane module to separate supplied salt water into desalted water and concentrated salt water;

- a pressure-compensating device, comprising several piston devices, to continuously introduce the salt water at an increased pressure level into the membrane module and to discharge the concentrated salt water, transferring its pressure energy in the process,

- a feed pump to introduce salt water at a pressure level into the pressure-compensating device, whereby

- in front of the piston, the piston devices possess an intake chamber, which is connected to the feed pump and the membrane module, and

- in the rear of the piston, the piston devices possess a discharge chamber, which is connected to the membrane module and to a discharge line for concentrated salt water,

- in the rear of the piston, the piston devices additionally possess a pressure chamber and the pressure chambers are hydraulically connected to each other by a single hydraulic connecting line, so that during operation a continuous, preset, identical pressure can be

exerted on a part of the piston to assist the pressure, which is exerted on the piston by the concentrated salt water introduced into the discharge chamber.

7. (Previously Presented) The device according to claim 6, wherein the piston devices are controlled in such a manner that simultaneously salt water is introduced into the intake chamber of at least one piston device, concentrated salt water is discharged from the discharge chamber of the same piston device, concentrated salt water is introduced into the discharge chamber of at least one other piston device, and salt water is conveyed from the intake chamber of the same piston device to the membrane module.

8. (Original) The device according to claim 6, wherein the piston devices are regulated by controllable intake- and discharge valves.

9. (Original) The device according to claim 7, wherein the connecting lines from the membrane module to the discharge chambers of the piston devices, and the lines to discharge concentrated salt water from the discharge chambers are provided with actively controlled valves.

10. (Previously Presented) The device according to one of claim 6, wherein the pressure-compensating device contains three identical piston devices.

11. (Previously Presented) The device according to one of claim 6, wherein the pistons of the piston devices are designed in such a manner that the pressure level prevailing in the pressure chamber can act upon one quarter of the surface area of the piston rear side and the pressure level prevailing in the discharge chamber can act upon three quarters of the surface area of the piston rear side.

12. (New) A pressure compensating device for use in a system for the continuous desalting of water, comprising;

a plurality of piston devices, each piston device having an intake chamber, a piston, a discharge chamber and a pressure chamber, the piston having a front piston face in fluid communication with the intake chamber and a rear piston face in fluid communication with the pressure chamber; and

a pressurized hydraulic line fluidly connecting the pressure chambers of each piston device, wherein a fluid pressure in the hydraulic line and each of the pressure chambers is in equilibrium.

13. (New) A system for the continuous desalting of water, comprising:

a membrane module to separate supplied salt water into desalted water and concentrated salt water;

a pressure-compensating device comprising a plurality of piston devices, each piston device includes a piston, an intake chamber, a discharge chamber and a pressure chamber, the intake chamber is fluidly connected to a feed pump and the membrane module, the discharge chamber is fluidly connected to the membrane module and to a discharge line for discharging concentrated salt water, the pressure chambers of each piston device are fluidly connected by a single pre-charged hydraulic connecting line, the pre-charged hydraulic connecting line in combination with the pressure chambers forms a closed fluid system of preset pressure acting on the pistons; and

a feed pump to introduce salt water at a pressure level into the pressure-compensating device.

14. (New) The device according to claim 13, wherein the piston devices are controlled in such a manner that simultaneously salt water is introduced into the intake chamber of at least one piston device, concentrated salt water is discharged from the discharge chamber of the same piston device, concentrated salt water is introduced into the discharge chamber of at least one other piston device, and salt water is conveyed from the intake chamber of the same piston device to the membrane module.

15. (New) The device according to claim 13, wherein the piston devices are regulated by controllable intake- and discharge valves.

16. (New) The device according to claim 14, wherein connecting lines from the membrane module to the discharge chambers of the piston devices, and lines to discharge concentrated salt water from the discharge chambers are provided with actively controlled valves.

17. (New) The device according to one of claim 13, wherein the pressure-compensating device contains three identical piston devices.